A Systems Approach to Delivery of Future UK Operational Clothing Soldier Systems

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Background

- The UK has experienced problems with integration of kit over a number of years.
- Individual pieces of equipment have often been optimised at the expense of overall system performance.

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Why a Systems Approach?

- Looks at the wider implications of any system.
- Ensures that all interfaces and integration issues are considered.
- Provides auditability and traceability of information.

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Why a Systems Approach?

- Enables stakeholders to be identified at an early stage and encourages buy in throughout the programme.
- Encourages the careful management and control of multiple sources of information and subject matter expert input.

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PROBLEM

REQUIREMENTS

ANALYSIS

DESIGN

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What will a Systems Approach provide?

- A method by which requirements can be distilled in light of the threat and tasks and activities being carried out.
- A way of fusing operational analysis with subject matter expert opinion to provide a more rounded and complete view.

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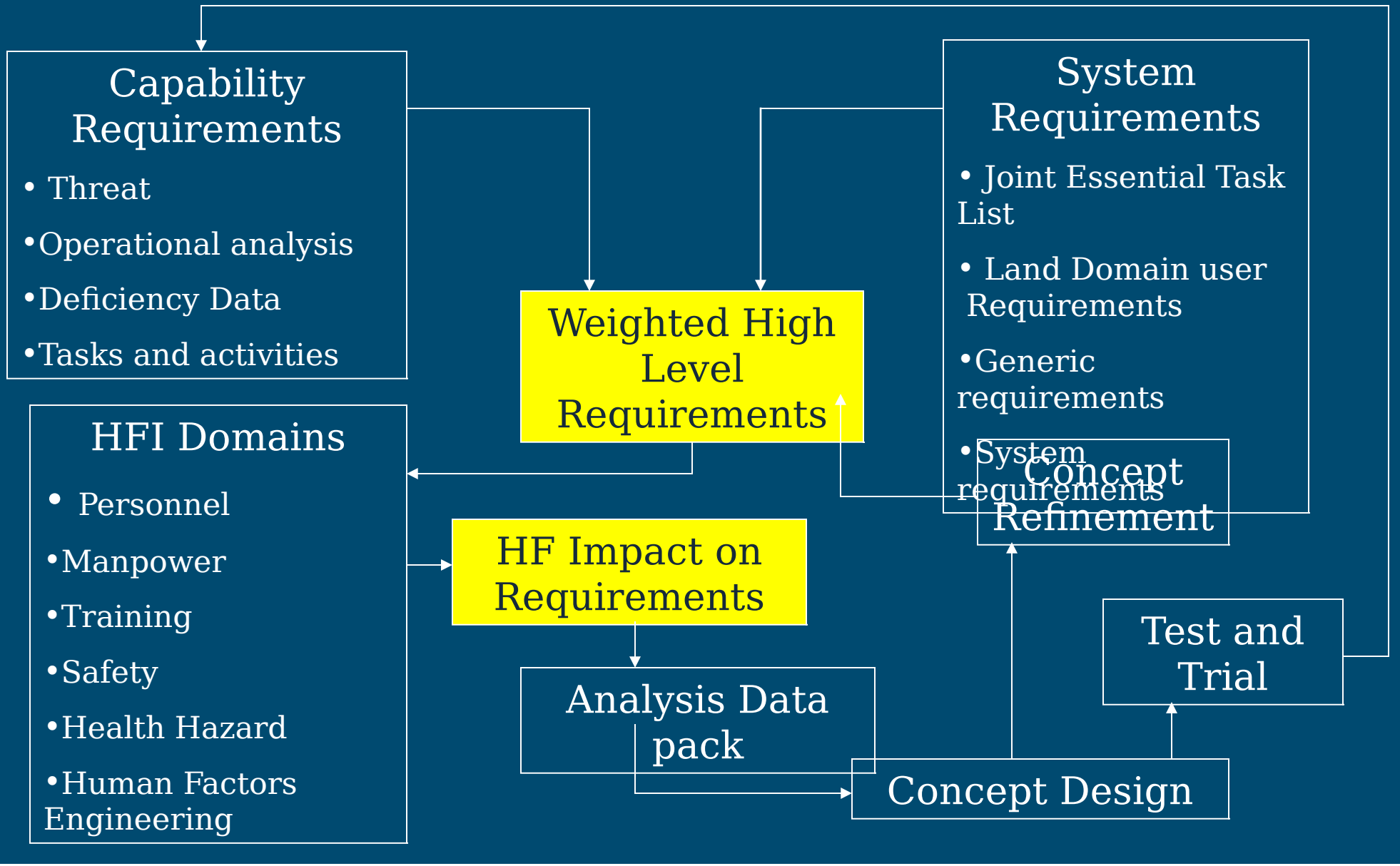

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Output

- Analysis data pack is passed to the design entity.
- Concept designs are generated that enable trade-off across capability domains.
- A concept soldier system is produced that enhances overall effectiveness.

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Work to Date

- Concept work to date has looked specifically at survivability issues.
- This considers other capability domains, but is not a complete system trade-off.
- It represents the first step in translating analysis into design.

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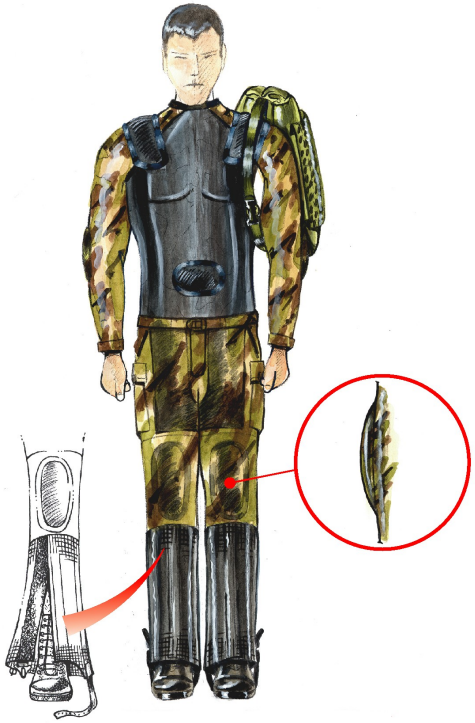
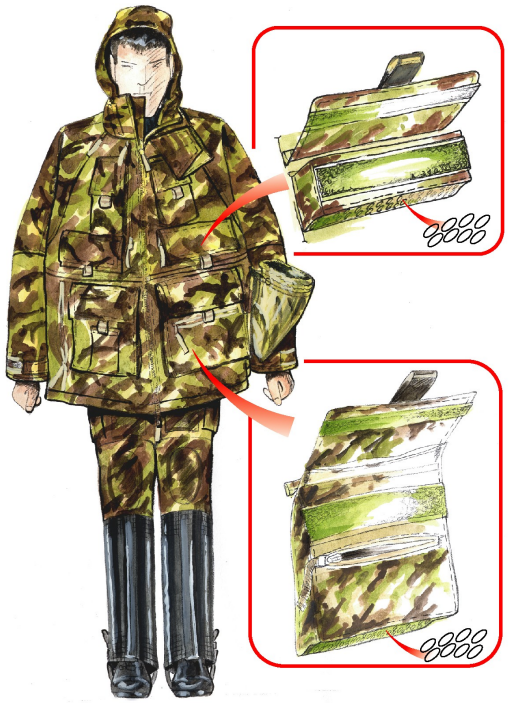
Design Iteration 1





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Analysis into design

- System designed to minimise negative integration issues with sub-systems.
- Working from the base layer out considering performance requirements for each layer and the interface between layers.

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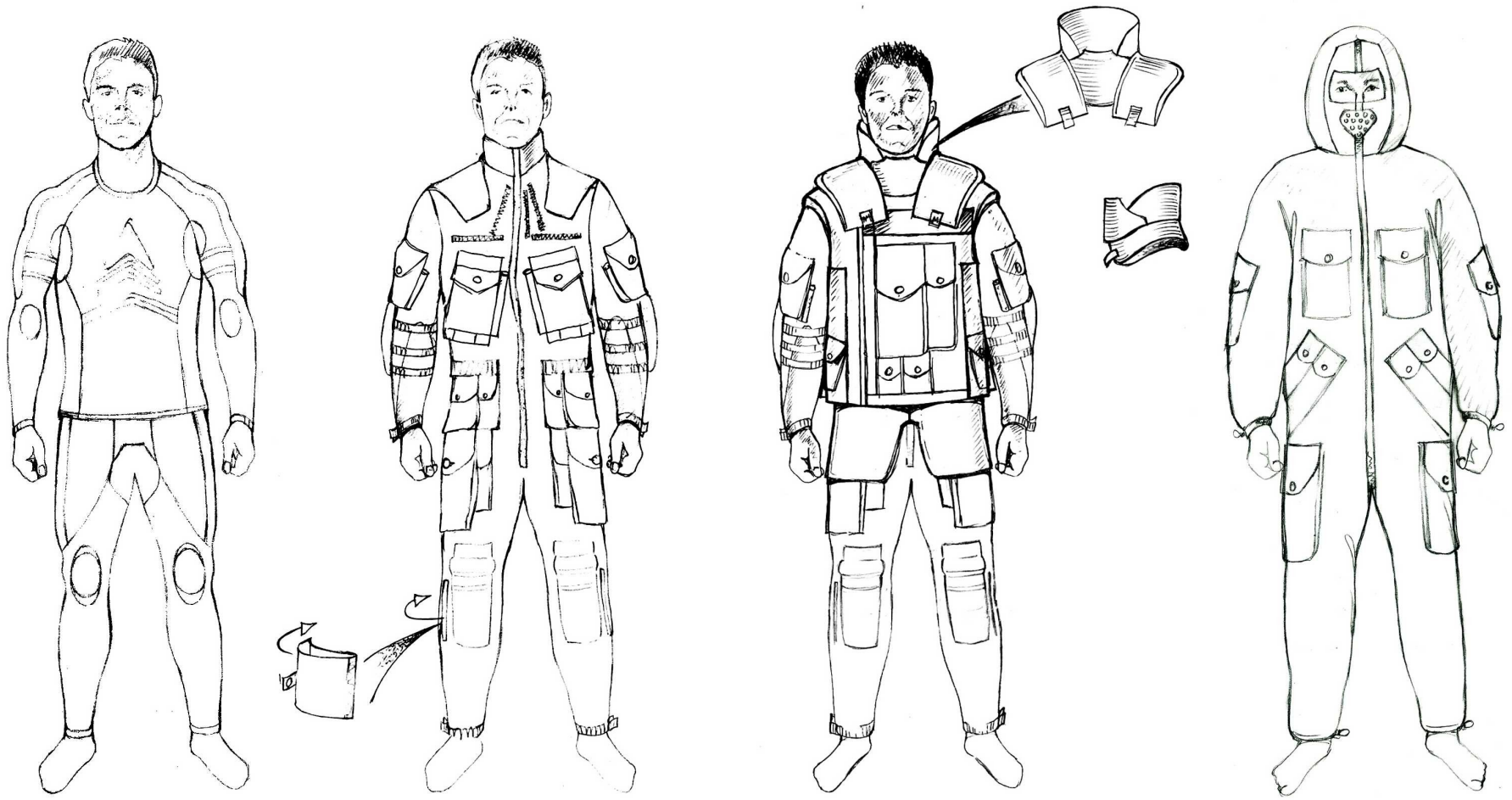
Design Iteration 2



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Summary

- The approach is a step change in thinking within C&T research.
- It fuses subject matter expert opinion with operational analysis to provide auditable and traceable information.
- Initial work has proved that analysis can be successfully translated into physical design.

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Future Work

- Complete a full trade-off across all capability domains.
- Provide this information to the design entity for translation into further iterations of a concept design.
- Refine the measures to determine success or failure of a given concept.

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Questions?

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